20

5

We claim:

- A substantially purified nucleic acid molecule that encodes a plant protein or fragment thereof comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 18014.
- 2. The substantially purified nucleic acid molecule according to claim 1, wherein said plant protein is a sorghum protein.
 - 3. A substantially purified sorghum protein or fragment thereof, wherein said sorghum protein is encoded by a nucleic acid molecule that comprises a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 18014.
 - 4. A transformed plant having a nucleic acid molecule which comprises:
 - (a) an exogenous promoter region which functions in a plant cell to cause the production of a mRNA molecule;
 - (b) a structural nucleic acid molecule comprising a nucleic acid sequence selected from the group consisting of SEQ ID NO: 1 through SEQ ID NO: 18014 or complements thereof;
 - (c) a 3' non-translated sequence that functions in said plant cell to cause termination of transcription and addition of polyadenylated ribonucleotides to a 3' end of said mRNA molecule.
- The transformed plant according to claim 3, wherein said structural nucleic acid
 molecule is a complement of any of the nucleic acid sequences of SEQ ID NO: 1 through SEQ
 ID NO: 18014.
 - 6. The transformed plant according to claim 4, wherein said plant is sorghum, wheat, soybean, cotton or maize.

5

- 7. The transformed plant according to claim 4, wherein said plant is maize.
- 8. The transformed plant according to claim 4, wherein said plant is soybean.
- 9. The transformed plant according to claim 4, wherein said plant is wheat.
- 10. The transformed plant according to claim 4, wherein said plant is cotton.
- 11. The transformed plant according to claim 4, wherein said plant is sorghum.